

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte Schoemann

Appeal No. _____

Appellants: Michael P. Schoemann et al.
Serial Number: 10/709,382
Filed: April 30, 2004
Art Unit: 3612
Examiner: Kiran B. Patel
Title: DOOR TRIM PANEL WITH DUAL DENSITY BOLSTER ARMREST
AND INTEGRATED COMPONENTS
Confirmation No.: 3381
Atty. Docket No.: MASL-37

Cincinnati, Ohio 45202

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Commissioner for Patents
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AMENDED BRIEF ON APPEAL

This amended brief is in furtherance of Applicants' Notice of Appeal filed June 23, 2006, appealing the decision of the Examiner dated March 27, 2006, rejecting claims 1, 2, 8-10, 15 and 22-26. A copy of the claims appears in the Appendix to this brief. This amended brief is also submitted in response to the Notice of Non-Compliant Appeal Brief mailed on September 22, 2006.

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I. Real Party in Interest

The real party in interest is Lear Corporation, of Southfield, Michigan, which is the assignee of the present invention.

II. Related Appeals and Interferences

There are no related appeals or interferences known to Appellants or Appellants' legal representative that will directly affect or be directly affected by the decision of the Board in the present appeal.

III. Status of the Claims

Claims 1, 2, 8-10, 15, and 22-26 are pending in the Appellants' application. Claims 1, 2, 8-10, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,821,465 to Stein et al. ("Stein") in view of JP 2000-264361 ("JP '361"). Claims 22-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Stein as applied to claim 1 and further in view of "ordinary skill in the art." All of the pending claims are the subject of this appeal.

IV. Status of Amendments

There have been no amendments filed after the rejection mailed on March 27, 2006.

V. Summary of Claimed Subject Matter

Referring to Figs. 1 and 2 for the sake of exemplary illustration, Appellants' claim 1 is directed generally to a door trim panel (10) for a door (12) of an automobile (16). (Application at page 4, line 16 to line 21). The door trim panel (10) includes a cover stock (18) that extends over various components, such as an armrest (20) and upper and lower energy absorbers (22, 24). (Application at Figs. 1 and 2; page 5, line 4 to line 12). More specifically, the armrest (20) is coupled to the cover stock (18) and has a first density. (Id.). The upper energy absorber or door bolster (22) is disposed above the armrest (20) and has a second density, while the lower energy absorber (24) is disposed below the armrest (20) and has a third density. (Id.). The second and third densities of the respective energy absorbers (22, 24) are each higher than the first density of the armrest (20). (Id.). Additionally, the armrest (20), upper energy absorber (22), and lower energy absorber (24) are all formed from polyolefin bead foam. (Application at page 5, line 22 to page 6, line 6).

Appellants' claim 9 is directed generally to a vehicle, such as an automobile (16), having a door (12) with a door trim panel (10). (Application at page 4, line 16 to line 21). Claim 9 and claim 1 are combination/sub-combination claims. In any event, the door trim panel (10) includes a cover stock (18) that extends over various components, such as an armrest (20) and upper and lower energy absorbers (22, 24). (Application at Figs. 1 and 2; page 5, line 4 to line 12). More specifically, the armrest (20) is coupled to the cover stock (18) and has a first density. (Id.). The upper energy absorber or door bolster (22) is disposed above the armrest (20) and has a second density, while the lower energy absorber (24) is disposed below the armrest

(20) and has a third density. (Id.). The second and third densities of the respective energy absorbers (22, 24) are each higher than the first density of the armrest (20). (Id.). Additionally, the armrest (20), upper energy absorber (22), and lower energy absorber (24) are all formed from polyolefin bead foam. (Application at page 5, line 22 to page 6, line 6).

Appellants' claim 22 is directed generally to a door trim panel (10) for a door (12) of an automobile (16). The door trim panel (10) includes a cover stock (18) that extends over various components, such as an armrest (20) and upper and lower energy absorbers (22, 24). (Application at Figs. 1 and 2; page 5, line 4 to line 12). More specifically, the armrest (20) is coupled to the cover stock (18) and has a first density. (Id.). The upper energy absorber or door bolster (22) is disposed above the armrest (20) and has a second density, while the lower energy absorber (24) is disposed below the armrest (20) and has a third density. (Id.). The second and third densities of the respective energy absorbers (22, 24) are each higher than the first density of the armrest (20). (Id.). The third density, however, is less than the second density. (Application at page 7, line 1 to line 4). Additionally, the armrest (20), upper energy absorber (22), and lower energy absorber (24) are all formed from polyolefin bead foam. (Application at page 5, line 22 to page 6, line 6).

Such an arrangement allows each of the components to be molded to desired densities for particular purposes. For example, the armrest (20) may be molded from the polyolefin bead foam to densities ranging between approximately 30 and 45 grams per liter so as to provide a soft, compressible feel for an armrest portion (28) of the door (12). (Application at page 5, line 22 to page 6, line 2). The upper and

lower energy absorbers (22, 24) may be molded from the same material to optimal densities for protecting passengers occupying the passenger compartment (26) in the event of a side impact. (Application at Fig. 1; page 6, line 4 to line 19). In particular, the second density of the upper energy absorber (22) may be optimized for male passengers, while the third density of the lower energy absorber (24) may be optimized for female passengers. (Id.). Thus, the upper energy absorber may be molded from the polyolefin bead foam to densities ranging between approximately 45 and 55 grams per liter and the lower energy absorber may be molded from the polyolefin bead foam to densities ranging between approximately 40 and 50 grams per liter. (Application at page 7, line 1 to line 4).

VI. Grounds of Rejection to be Reviewed on Appeal

A. Whether claims 1, 2, 8-10, and 15 were improperly rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,821,465 to Stein et al. in view of JP 2000-264361.

B. Whether claims 22-26 were improperly rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,821,465 to Stein et al. as applied to claim 1 and further in view of “ordinary skill in the art.”

VII. Argument

A. Claims 1, 2, 8-10, and 15 were improperly rejected under 35 U.S.C. § 103(a) as being unpatentable over Stein et al. in view of JP '361.

Claims 1, 2, 8-10, and 15 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,821,465 to Stein et al. ("Stein") in view of JP 2000-264361 ("JP '361"). Claims 1 and 9 are the only independent claims of this rejected group. Claim 1 is directed to a door trim panel comprising:

a cover stock;

an armrest coupled to the cover stock and having a first density;

an upper energy absorber disposed above the armrest and having a second density higher than the first density; and

a lower energy absorber disposed below the armrest and having a third density higher than the first density,

wherein the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam.

Claim 9 is directed to a vehicle that includes a door trim panel reciting the same features as recited in claim 1. Because claim 9 is patentable for at least reasons discussed with respect to claim 1, the remarks in this appeal will focus primarily upon claim 1.

The rejection of claim 1 should be reversed because the Examiner failed to present a *prima facie* case of obviousness. In particular, the Examiner's rejection of claim 1 should be reversed because: 1) Stein fails to teach or suggest the claimed invention, and JP '321 fails to teach or suggest a modification of Stein that results in the

claimed invention; and 2) JP '321 is a non-analogous art reference that cannot be used as a basis for an obviousness rejection in combination with Stein.

1. There is no teaching or suggestion of a modification of Stein that results in the claimed invention.

The Examiner states that Stein “discloses the invention as claimed” but “does not disclose the foam to be polyolefin bead foam.” (Office Action mailed March 27, 2006 at p. 2). Thus, the Examiner is using as his primary teaching a door trim panel as taught by Stein having a cover stock overlying a low density material region that forms an armrest and a high density material region on either side of the armrest. The Examiner then uses JP '321, which is directed to a device for protecting a window sash, to meet the recitation that “the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam.” Combining the references in this manner is improper and stretches the application of obviousness to unacceptable extremes.

The Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Only if the Examiner meets this burden does the burden shift to an applicant to come forward with the evidence or an argument. *Id.* If the examination at the initial stage does not produce a *prima facie* case of obviousness, then without more, the applicant is entitled to grant of the patent. *Id.* A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the plain subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 782 (Fed. Cir. 1993). In other words, to properly combine references to make a *prima facie* case of

obviousness, there must have been some teaching or suggestion in either one of the references or both, or knowledge generally available to one of ordinary skill in the relevant art that would have led one skilled in the art to combine the relevant teachings of the references. *W.L. Gore & Associates v. Garlock, Inc.*, 220 USPQ 303, 311 (Fed. Cir. 1983).

Stein is directed to a door trim panel (10) having an armrest formed from a single multi-density component. As shown in Fig. 1 of Stein, the door trim panel (10) includes upper and lower sections of a high density polymeric material (16) and a intermediate section of a low density polymeric material (14). A cover material (22) extends over at least a portion of the sections of high density polymeric material (16) and low density polymeric material (14) that forms an armrest. Although Stein teaches that the low density material may be a polyolefin bead foam, the reference is devoid of any recitation of the type of materials that may be used for the high density polymeric material. Nothing in Stein teaches or suggests that the high density polymeric material is the same as the low density region or that the high density region is a foam, or more particularly, is a polyolefin bead foam.

JP '321 is directed to a window sash protection member. The protection member (A) is molded from polyolefin bead foam into an L-shaped configuration so that it can be positioned on the corner of a window sash's outer frame (1). As shown in Fig. 1 of the reference, one projection member is placed on each corner of the outer frame (1). The protection members absorb shock while the sash is transported during shipping and can be advantageously removed for repeated use. Because of the

properties of the polyolefin foam, the protection members are not likely to cause scratch marks on the sash during use and subsequent removal.

In the Office Action, the Examiner asserts that it would have been obvious to use a polyolefin bead foam, as taught by JP '321 to form the window sash protector, to form both the low density material region and the high density material region in the door trim panel disclosed by Stein. Before even addressing the use of polyolefin bead foam as the material for the high and low density regions, Appellants note that Stein fails to teach or suggest that the upper and lower sections of high density material and the intermediate section of low density material may be made from the same material. This is in contrast to claim 1, which specifically recites that "the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam." In other words, claim 1 requires that the armrest and upper and lower energy absorbers be made from the same material (but having different densities). Stein, however, fails to teach or suggest that the upper, lower and intermediate sections be made from the same material. Moreover, JP '361 fails to cure the deficiency in Stein.

In addition to the above, Stein fails to teach or suggest the use of a polyolefin bead foam to form both the high and low density material regions in the door trim panel, as readily admitted by the Examiner. There is no teaching, suggestion or motivation for modifying the trim panel of Stein so that "the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam," as recited in claim 1. In particular, the Examiner has failed to state why it would have been obvious for one skilled in the art to incorporate the polyolefin bead foam of a window sash protection member into a section of a door trim panel "to provide the door trim

panel to include the armrest with energy absorbers with excellent shock absorbing buffer taught by Japan (JP 2000-264361." (Office Action mailed March 27, 2006 at p. 3). But even assuming that it was proper to combine the references in the manner suggested by the Examiner, there is still no specific teaching or suggestion that the Examiner can point to that would motivate one of ordinary skill in the art to form the upper, lower and intermediates sections of Stein from the same material. The Examiner cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988). Accordingly, for the reasons provided above, the rejection of claims 1, 2, 8-10, and 15 under 35 U.S.C. § 103(a) is improper and falls far short of a *prima facie* case of obviousness.

2. JP '321 is a non-analogous prior art reference.

Another factor pointing away from the Examiner's conclusion of obviousness is that JP '321 is a non-analogous prior art reference relative to Stein and the claimed invention. In order to use a reference as the basis for rejection of an invention, the reference must be analogous prior art. *In re Oetiker*, 977 F.2d at 1446. To be qualified as analogous prior art, the reference in question must either be: (1) in the field of technology of the claimed invention; or (2) reasonably related to the problem addressed by the claimed invention. *Id.*; *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979). Neither of these criteria is present.

First, window sash protection members are not within the same field of technology, or "field of endeavor," as automobile door trim panels. Even if one acknowledges that automobile doors include windows, such a connection between the

two fields still fails because automobile windows do not include sashes for holding window panes. The Examiner must show adequate support for “findings on the scope of the field of endeavor in the application’s written description and claims, including the structure and function of the invention.” *In re Bigio*, 381 F.3d 1320, 1326 (Fed. Cir. 2004). The Examiner has not met this burden.

Second, window sash protection members are not reasonably related to the problems addressed by the door trim panel of claim 1. The invention recited in claim 1 integrates various components in a door trim panel to allow for a soft armrest and upper and lower energy absorbers without significantly increased cost. (Application at paragraphs [10] and [19]). On the other hand, window sash protection members formed from polyolefin bead foam are designed to protect windows during transport or shipping without scratching the window sash. One having ordinary skill in the art of automobile trim panels would have had no reason to turn to the art of window sash protection members when designing a door trim panel with integrated components. The combination of elements from non-analogous sources, in a manner that reconstructs the claimed invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d at 1447. Accordingly, Appellants respectfully submit that JP ‘361 is a non-analogous prior art reference and the Examiner’s rejections should be reversed.

B. Claims 22-26 were improperly rejected under 35 U.S.C. § 103(a) as being obvious over Stein as applied to claim 1 and further in view of ordinary skill in the art.

Claims 22-26 stand rejected under 35 U.S.C. § 103(a) as being obvious over Stein “as applied to claim 1 and further in view of ordinary skill in the art.” (Office Action mailed March 27, 2006 at p. 3). Claim 22 is the only independent claim of this rejected group. As a preliminary matter, claim 22 recites that “the armrest, upper energy absorber, and lower energy absorber are formed from a polyolefin bead foam” as does claim 1, discussed above. Thus, claim 22, like claim 1, recites not only a specific material for the armrest and upper and lower energy absorbers, but also recites that the components are formed from the same material. The Examiner acknowledges that Stein does not disclose that both the high and low density material regions be formed from a polyolefin bead foam, (Office Action mailed March 27, 2006 at p. 2), but again fails to address how this deficiency has been overcome in his rejection of claims 22-26. Accordingly, claim 22 is allowable for at least the reasons discussed above for claim 1.

The Examiner also acknowledges that Stein does not disclose varied ranges of densities for the first, second, and third densities, as further recited in claim 22. More specifically, claim 22 recites: 1) “a second density higher than the first density,” and 2) “a third density higher than the first density and less than the second density.” According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide varied ranges of densities “since it has been held to be within the general skill of a worker in the art to use the available foam with required density as specified by the design specification which would provide the

desire[d] level of protection for the passengers in the event of a side impact.” (Office Action mailed March 27, 2006 at p. 3). The Examiner fails to provide any evidence to support this statement. The statement implies that a court holding is being referenced, but gives no case citation. Such a statement also presumes the solution to the problem addressed by the claimed invention—that there is a specification for a door trim panel having three integrated components formed from the same material, i.e., polyolefin bead foam, but having different densities. Defining a problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness. *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 881 (Fed. Cir. 1998). The present application does not just arbitrarily assign different density ranges to the various components but provides specific reasons for having the densities of the upper and lower energy absorbers differ. In particular, the second density of the upper energy absorber may be optimized for male passengers, while the third density of the lower energy absorber may be optimized for female passengers. (Application at paragraph [20]). Stein does not address or in any way discuss that the two high density material regions may be formed from not only the same material, but also from a polyolefin bead foam that has two different densities. Accordingly, Appellants respectfully submit that claims 22-26 were improperly rejected under 35 U.S.C. § 103(a) and request that the rejection be overturned.

VIII. Conclusion

In conclusion, Appellants respectfully request that the Board reverse the Examiner's rejections of all the pending claims and that the application be passed to issue. If there are any questions regarding the foregoing, please contact the undersigned at 513/241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

WOOD, HERRON & EVANS, L.L.P.

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APPENDIX OF CLAIMS

1. (Previously Amended) A door trim panel, comprising:

a cover stock;

an armrest coupled to the cover stock and having a first density;

an upper energy absorber disposed above the armrest and having a second density higher than the first density; and

a lower energy absorber disposed below the armrest and having a third density higher than the first density,

wherein the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam.

2. (Original) The door trim panel of claim 1, wherein the second and third densities are substantially equal.

3.-7. (Canceled)

8. (Original) The door trim panel of claim 1, wherein the cover stock is at least one of a textile, a polyvinyl chloride (PVC), and a thermoplastic olefin (TPO), each with a polypropylene foam backing.

9. (Previously Amended) A vehicle, comprising:

a body including a door; and

a door trim panel, the door trim panel including a cover stock, an armrest coupled to the cover stock and having a first density, an upper energy absorber disposed above the armrest and having a second density higher than the first density, and a lower energy absorber disposed below the armrest and having a third density higher than the first density,

wherein the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam.

10. (Original) The vehicle of claim 9, wherein the second and third densities are substantially equal.

11.-14. (Canceled)

15. (Original) The vehicle of claim 9, wherein the cover stock is at least one of a textile, a polyvinyl chloride (PVC), and a thermoplastic olefin (TPO), each with a polypropylene foam backing.

16.-21. (Canceled)

22. (Previously presented) A door trim panel, comprising:

a cover stock;

an armrest coupled to the cover stock and having a first density;

an upper energy absorber disposed above the armrest and having a second density higher than the first density; and

a lower energy absorber disposed below the armrest and having a third density higher than the first density and less than the second density,

wherein the armrest, upper energy absorber and lower energy absorber are formed from a polyolefin bead foam.

23. (Previously presented) The door trim panel of claim 22, wherein the cover stock is at least one of a textile, a polyvinyl chloride (PVC), and a thermoplastic olefin (TPO), each with a polypropylene foam backing.

24. (Previously presented) The door trim panel of claim 22, wherein the second density is between approximately 45 and 55 g/l and the third density is between approximately 40 and 50 g/l.

25. (Previously presented) The vehicle of claim 9, wherein the third density is less than the second density.

26. (Previously presented) The vehicle of claim 25, wherein the second density is between approximately 45 and 55 g/l and the third density is between approximately 40 and 50 g/l.

APPENDIX OF EVIDENCE

(None)

APPENDIX OF RELATED PROCEEDINGS

(None)